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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,264	02/12/2004	Koji Nitta	70456-012	4866

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EXAMINER
VAN, LUAN V

ART UNIT	PAPER NUMBER
1753	

MAIL DATE	DELIVERY MODE
06/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/776,264	NITTA ET AL.	
	Examiner	Art Unit	
	Luan V. Van	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 5-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 5-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 16, 2007 has been entered.

Response to Amendment

Applicant's amendment of April 18, 2007 does not render the application allowable.

Status of Objections and Rejections

All rejections from the previous office action are withdrawn in view of Applicant's amendment.

New grounds of rejection under 35 U.S.C. 103(a) are necessitated by the amendments.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 5 and 8 are rejected under 35 U.S.C. 102(a) as being anticipated by Kasajima et al. (*Electrochemical Intercalation/Deintercalation of Lithium at an Isotropic Graphite in a LiBr-KBr-CsBr Eutectic Melt*).

Regarding claims 1 and 8, Kasajima et al. teach a molten salt bath for electrodeposition, containing lithium bromide, potassium bromide, and cesium bromide with the respective mole fraction of 56.1, 18.9 and 25.0 (see Experimental section), wherein a sum of the mole fraction of said lithium bromide and a mole fraction of said cesium bromide is 81.1 (= 56.1+25), which is within the range of the instant claim, with respect to the entire said molten salt bath, and a mole fraction of said lithium bromide to said cesium bromide is about 2.2 (= 56.1/25), which is within the range of the instant claim. With respect to the limitation of using the bath for electroforming, the limitation is an intended use of the instant invention and, thus, is not given patentability weight. Furthermore, because the instant claims are directed to a bath, the specified metal product does not further limit the claims and is thus not given patentability weight. Therefore, the instant claims are anticipated by Kasajima et al.

Regarding claim 5, the molten salt bath of Kasajima et al. has a eutectic composition, since it has the same composition as that of the instant claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasajima et al. in view of Uriu et al.

Regarding claim 6, Kasajima et al. teach an electrodepositing method and a molten salt bath for electrodeposition, containing lithium bromide, potassium bromide, and cesium bromide with the respective mole fraction of 56.1, 18.9 and 25.0 (see Experimental section), wherein a sum of the mole fraction of said lithium bromide and a mole fraction of said cesium bromide is 81.1 (= 56.1+25), which is within the range of the instant claim, with respect to the entire said molten salt bath, and a mole fraction of said lithium bromide to said cesium bromide is about 2.2 (= 56.1/25), which is within the range of the instant claim. With respect to the limitation of using the bath for electroforming, the limitation is an intended use of the instant invention and, thus, is not given patentability weight.

Kasajima et al. differ from the instant claim in that the reference does not explicitly teach a resist to selectively mask the substrate or the specific metal product of the instant claim.

Uriu et al. teach a method of manufacturing a metal product, comprising the steps of: forming a resist pattern on a conductive substrate and exposing a portion of said conductive substrate (example 1); immersing said conductive substrate having said resist pattern formed into an electrolytic bath for electroforming; and precipitating a metal at a portion where said conductive substrate is exposed. In addition, Uriu et al. teach that although the exemplary conductive patterns are formed of Ag, any material which is available for electroforming such as Ni, Cu, Pd, Au, **Cr**, or an alloy thereof can be used for the conductive patterns (column 15 lines 16-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the method of Kasajima et al. by using the resist pattern of Uriu et al., because using a resist pattern would allow selective deposition of a metal on the exposed area of a conductive substrate, thus enabling the formation of a conductive pattern. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have further modified the method of Kasajima et al. by forming the chromium of Uriu et al., because such metal would be useful for the production of a lamination chip inductor as suggested by Uriu et al. (column 1 lines 14-20).

Regarding claim 7, Kasajima et al. teach the molten salt bath is set to 523K (or 250° C).

Response to Arguments

Applicants' arguments have been considered but are moot in view of the new ground(s) of rejection. However, as noted above, because independent claims 1 and 8 are directed to a bath, the specified metal product does not further limit the claim and is therefore not given patentability weight. Therefore, the instant claims are anticipated by Kasajima et al. With respect to the reference to Uriu et al., Uriu et al. teach that although the exemplary conductive patterns are formed of Ag, any material which is available for electroforming such as Ni, Cu, Pd, Au, **Cr**, or an alloy thereof can be used for the conductive patterns (column 15 lines 16-20).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luan V. Van whose telephone number is 571-272-8521. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LVV
June 6, 2007

EDNA WONG
PRIMARY EXAMINER
6/7/07